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# NOTICE OF ALLOWANCE AND FEE(S) DUE

24247

7590

04/01/2003

TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110 EXAMINER

LEE, HSIEN MING

ART UNIT CLASS-SUBCLASS

438-015000

2823
DATE MAILED: 04/01/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,323	08/29/2001	Walter L. Moden	3089.2US (96-0734.2)	9742

TITLE OF INVENTION: METHOD AND APPARATUS FOR APPLYING ADHESIVES TO A LEAD FRAME

APPLN. TYPE	TYPE SMALL ENTITY ISSUE FEE		PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300	\$300	\$1600	07/01/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

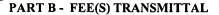
B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE

Commissioner for Patents Washington, D.C. 20231

(703)746-4000 <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for

maintenance fee notifications CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1) Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 24247 04/01/2003 7590 TRASK BRITT P.O. BOX 2550 Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile SALT LAKE CITY, UT 84110 transmitted to the USPTO, on the date indicated below (Depositor's name) (Signature APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/942.323 08/29/2001 Walter L. Moden 3089.2US (96-0734.2) 9742 TITLE OF INVENTION: METHOD AND APPARATUS FOR APPLYING ADHESIVES TO A LEAD FRAME SMALL ENTITY APPLN, TYPE ISSUE FEE PUBLICATION FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1300 \$300 \$1600 07/01/2003 **EXAMINER** ART UNIT CLASS-SUBCLASS LEE, HSIEN MING 2823 438-015000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. single firm (having as a member a registered attorney or agent) and the names of up to 2 ☐ "Fee Address" indication (or "Fee Address" Indication form registered patent attorneys or agents. If no name PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer is listed, no name will be printed. Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent) ☐ individual ☐ corporation or other private group entity ☐ government 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): A check in the amount of the fee(s) is enclosed. □ Issue Fee ☐ Payment by credit card. Form PTO-2038 is attached. Publication Fee The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to ☐ Advance Order - # of Copies Deposit Account Number (enclose an extra copy of this form) Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Authorized Signature) (Date) NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/942,323	08/29/2001	Walter L. Moden	3089.2US (96-0734.2) 97-		
24247	7590 04/01/2003		EXAMINER		
TRASK BRITT P.O. BOX 2550		LEE, HSIEN MING			
	SALT LAKE CITY, UT 84110		ART UNIT	PAPER NUMBER	
			2823		
			DATE MAILED: 04/01/2003		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 0 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 0 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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24247	7590	04/01/2003			
TRASK BRIT P.O. BOX 2550	_			LEE, HSIEN	MING
SALT LAKE C		34110		ART UNIT	PAPER NUMBER
UNITED STAT	TES			2823	
				DATE MAILED: 04/01/2003	•

# Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

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	Application	No.	Applicant(s)		
AL CL. PAIL LETTE.	09/942,323		MODEN ET AL.		
Notice of Allowability	Examiner		Art Unit		
	Hsien-Ming	Lee	2823		
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS or other appro IGHTS. This a	<ul> <li>CLOSED in this apprinted communication opportunity</li> <li>CLOSED in this printed in the communication is subject to the communication in the co</li></ul>	olication. If not includ will be mailed in due	ed course. <b>THIS</b>	
1. This communication is responsive to 1/16/03.					
2. The allowed claim(s) is/are 1-421.					
3. The drawings filed on 29 August 2001 are accepted by the	Examiner.				
4. Acknowledgment is made of a claim for foreign priority und a) All b) Some* c) None of the:	der 35 U.S.C. §	119(a)-(d) or (f).			
1. Certified copies of the priority documents have	e been received	í.			
2. Certified copies of the priority documents have	e been received	f in Application No	·		
3. Copies of the certified copies of the priority do	cuments have	been received in this i	national stage applica	ition from the	
International Bureau (PCT Rule 17.2(a)).					
* Certified copies not received:			,		
5. Acknowledgment is made of a claim for domestic priority up	nder 35 U.S.C.	§ 119(e) (to a provisi	onal application).		
(a) The translation of the foreign language provisional a			,		
6. Acknowledgment is made of a claim for domestic priority un	nder 35 U.S.C.	§§ 120 and/or 121.			
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of 7.   A SUBSTITUTE OATH OR DECLARATION must be subminformal patent application (PTO-152) which gives reas	this application	attached EXAMINER	ITH PERIOD IS NOT 'S AMENDMENT or i	EXTENDABLE	
<ul> <li>8. CORRECTED DRAWINGS must be submitted.</li> <li>(a) including changes required by the Notice of Draftsper.</li> <li>1) hereto or 2) to Paper No.</li> </ul>	son's Patent D	rawing Review ( PTO-	-948) attached		
(b) including changes required by the proposed drawing of	correction filed	, which has be	een approved by the l	Examiner.	
(c) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No					
Identifying indicia such as the application number (see 37 CFR 1	.84(c)) should b	e written on the drawir	ngs in the top margin (	not the back)	
of each sheet. The drawings should be filed as a separate paper	with a transmit	tal letter addressed to	the Official Draftspers	on.	
9. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT FOR T	sit of BIOLOC HE DEPOSIT	GICAL MATERIAL N OF BIOLOGICAL MA	nust be submitted. I TERIAL.	Note the	
Attachment(s)					
<ul> <li>1 ☐ Notice of References Cited (PTO-892)</li> <li>3 ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>5 ☒ Information Disclosure Statements (PTO-1449), Paper No</li> <li>7 ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	<u>2</u> .	4☐ Interview Summa 6⊠ Examiner's Ame	al Patent Application ( ary (PTO-413), Paper ndment/Comment ement of Reasons for	· No	
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## **DETAILED ACTION**

# #5/C 4-1-03

#### Remarks

1. The 102(e) rejections to claims 1-4 and 9 are withdrawn in response to applicants' arguments filed 1/16/03.

2. Claims 1-421 are pending in the application.

#### Examiner's Amendment

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Joseph A. Walkowski (Reg. No. 28,765) on March 28,2003.

4. The application has been amended as follows:

In specification, page 2, first paragraph, at line 2, replace "1999, pending" with -- 1999,

now U.S. Patent 6,346,152 --.

## Allowable Subject Matter

- 5. Claims 1-421 are allowed.
- 6. The following is an examiner's statement of reasons for allowance:

The prior art of record, Moden to US 5,733,800, in Figs. 2A-2B teaches a method for applying viscous material to at least one semiconductor component, the method comprising:

• providing a pool 36 (i.e. sprue) containing heated resin material 30, the heated resin material pool 36 shaped such that an exposed surface of the heated resin material 30

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is located in a precise location (i.e. the bottom 38 of the pool 36) and including at least one upward facing opening (i.e. the opening facing a plunger 32), the at least upward facing opening exposing at least the exposed surface of the heated resin material 30 (Fig.2A);

- melting the heated resin material 30 by forcing the plunger 32 downward to the pool
   36 form a viscous resin material 30 (Fig.2B); and
- forcing the viscous resin material 30 flowing through the bottom 38 of the pool 36 and into the cavity 44 of one semiconductor component 100.

In contrast, the prior art of record at least neither teaches nor suggests: (1) aligning at least one semiconductor component over the viscous material pool; (2) wetting a specific location of the at least one semiconductor component with the viscous material; (1) biasing the semiconductor component downward proximate the viscous material in the viscous material pool; (2) providing one of a hydraulic biasing mechanism, pneumatic biasing mechanism, and electrically-powered biasing mechanism configurated to place the one semiconductor component proximate the viscous material; (3) raising the viscous material pool upward proximate the semiconductor component; (4) leveling the exposed surface of the viscous material prior to wetting a specific location of the semiconductor component; and (5) exposing the exposed surface of the viscous material having a height that extends above the height of the at least one peripheral edge.

Therefore, the claimed invention is neither anticipated nor rendered obvious over the prior art of record.

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7. Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

8. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Hsien-Ming Lee whose telephone number is 703-305-7341. The

examiner can normally be reached on M-F (9:00  $\sim$  5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Olik Chaudhuri can be reached on 703-306-2794. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-308-7722 for regular

communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-308-0956.

Hsien-Ming Lee

Examiner

Art Unit 2823

March 28, 2003

Olik Chaudhuri

Supervisory Patent Examiner

Technology Center 2800